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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,219	04/05/2006	Nigel-Philip Cox	2002P14335WOUS	6983
7590 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830			EXAMINER CARRILLO, BIBI SHARIDAN	
			ART UNIT 1792	PAPER NUMBER
			MAIL DATE 10/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,219

Applicant(s)

COX ET AL.

Examiner

Sharidan Carrillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17-18, and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is indefinite because line 3 should recite "the second acid bath". Claim 18 is indefinite because it is unclear whether "at least one salt bath" and at least one acid bath" refers to the same salt bath or the same acid bath, recited in claim 13.

Claims 22-23 are indefinite because they are dependent on cancelled claim 21.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 13, 15-20, 23 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Wustman et al. (US2005/0161439).

Wustman teaches removing an aluminide coating from a turbine (paragraph 33) comprising treating the turbine component in a salt bath comprising NaOH and KOH (paragraph 52), treating the substrate with an acid comprising nitric acid. In paragraph 6, Wustman teaches that it is well known to strip the coating from the substrate with combinations of acids including nitric acid, phosphoric acid. Re claim 13, Wustman teaches a nickel-based superalloy which is coated with an aluminide bond coating and a yttria-stabilized zirconia thermal barrier top coat (paragraph 76). In paragraph 77, Wustman teaches performing a mechanical operation to remove the thermal barrier coating. Specifically, Wustman teaches grit blasting the blade to remove the thermal barrier coating, treating the turbine component with a caustic bath (KOH) followed by treating with an acid bath of nitric acid solution (paragraph 78). Paragraph 52 teaches the caustic basic includes NaOH, KOH and mixtures thereof. Paragraph 6 teaches stripping the aluminide with various combinations of acids including nitric and phosphoric acid. The limitation of adding an oxygen donor to the salt bath are met since Wustman teaches an aqueous caustic solution and water inherently serves as an oxygen donor. It is well known in the art, as evidenced by Markarian et al. (4155154, col. 3, lines 9-11) that water serves as an oxygen donor. The limitations of "the combination of steps resulting in the removal of the thermal barrier coating and bonding layer" are met since Wustman teaches grit blasting to remove the ceramic thermal barrier coating and treating with solutions of caustic and acid to remove the aluminide

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bond coating. Re claim 15, paragraph 78 teaches two acid baths, a first acid bath comprising a cold nitric acid solution and a second acid bath comprising 30% by weight nitric acid and about 0.3% by weight Activol wetting agent. Re claim 16, refer to paragraph 35 which teaches HCl can be added to the nitric acid bath. Re claim 17, refer to paragraph 6. Re claim 18, refer to paragraph 49. Re claims 19 and 20, refer to paragraphs 46 and 77. Additionally grit blasting would inherently produce an aluminide coating having smaller particles, thereby the limitations of grinding the turbine component would inherently be met. Re claim 20, refer to paragraph 78 which teaches grinding. Re claim 23, the removal of aluminide (i.e. metal oxide) into the caustic bath reads on applicant's claimed limitation. Re claim 25, Wustman teaches rinsing between chemical treatment steps. Re claim 26, refer to paragraph 36.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wustman et al. (US2005/0161439).

Re claim 14, Wustman fails to teach the ratio of KOH to NaOH. Wustman teaches using a combination of KOH, NaOH. In the absence of a showing of criticality, it would have been within the level of the skilled artisan to adjust the concentration of the bases as needed in order to effectively strip the aluminide coating from the substrate surface. Re claim 24, Wustman fails to teach drying. It would have been within the level of the skilled artisan to dry the substrate in order to remove any solvent residue and or water stain prior to performing additional steps such as recoating.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wustman et al. (US2005/0161439) in view of Fusnocht (3532591).

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Wustman fails to teach the oxygen donor of Na₂O. However, Wustman teaches an aqueous solution of NaOH. Fusnocht teaches that reagent or technical grade NaOH has normal impurities which include Na₂O (col. 2, lines 24-27). Since Wustman teaches an NaOH bath and Fusnocht teaches NaOH includes impurities such as Na₂O, one would reasonably expect the NaOH bath of Wustman to also include Na₂O impurities, thereby meeting the limitations of claim 22.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 13-20 and 22-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-10, and 13 of copending Application No. 11/502487. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are

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directed to removing a layer by treating with a salt bath containing an oxygen donor and treating with an acid bath.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

11. The rejection of the claims, under 112, second paragraph is maintained for the reasons set forth above.

12. The rejection of the claims as being anticipated by Wustman is maintained for the following reasons. Applicant argues that Wustman fails to teach removing components of a layer system including a ceramic thermal barrier coating. Applicant's arguments are unpersuasive in view of the teachings recited in paragraphs 76-77. Specially, Wustman teaches a superalloy which is coated with an aluminide bond coating and then further coated with a yttria stabilized zirconia thermal barrier top coat. In paragraph 77, Wustman teaches grit blasting to remove the thermal barrier coating (i.e. yttria stabilized zirconia) and treating the turbine component with an acidic solution to remove the aluminide bond coating. Paragraphs 59-64 teach removing the aluminide coating by treating with a caustic solution and then an acidic solution. Paragraph 78 teaches removing the aluminide coating by treating with a caustic solution and then an acidic solution.

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13. In reference to applicant's argument that water is not an oxygen donor, the examiner has provided the prior art of Markarian et al., as a teaching reference to show that water inherently serves as an oxygen donor.

14. Applicant further argues that there is no teaching or suggestion that the NaOH of Wustman would include NaO as an impurity. Applicant's arguments are unpersuasive. The examiner has clearly shown that reagent or technical grade NaOH has normal impurities which include Na₂O (col. 2, lines 24-27). Since Wustman teaches an NaOH bath and Fusnocht teaches NaOH includes impurities such as Na₂O, one would reasonably expect the NaOH bath of Wustman to also include Na₂O impurities, thereby meeting the limitations of claim 22.

15. The double patenting rejection is maintained since applicant has not filed a Terminal Disclaimer.

16. The rejections of the claims as being unpatentable over Evans are withdrawn in view of the newly amended claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharidan Carrillo whose telephone number is 571-272-1297. The examiner can normally be reached on M-W 6:30-4:00pm, alternating Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sharidan Carrillo
Primary Examiner
Art Unit 1792

bsc


SHARIDAN CARRILLO
PRIMARY EXAMINER